

NCDOT ROADWAY PLAN PREPARATION

CHAPTER 1 : TIP FOLDER STRUCTURE

Folder Structure


- All TIP projects will have the following standard folder structure (except for a few old projects that are still around).

These folders are named according to their usage and the table below summarizes the TIP root sub-folder names.

HOME »Engineering Coordination » TIP Folder Structure	
TIP Root Folder Structure	
To establish uniformity among PEF's and Highway Design Units, all electronic submittals shall conform to a standard folder structure. These folders are named according to their usage. The table below summarizes the TIP root sub-folder names.	
Common	Folder for 2 sub-folders: <i>Transmittals</i> and <i>MileStones</i> . The Transmittals folder contains transmittal documents between the various units. The MileStones folder will not be used for the time being, and should be ignored. It has been placed there to accommodate future document management systems. All <i>DOT</i> and <i>DOH</i> domain users have "Read" and "Modify" permissions for this folder.
Drainage	Folder for ".dm" files from the Hydraulics unit. Note: The files in this folder should only be modified by the Hydraulics or Roadway Design units.
DTM	Folder for ".dtm" files from both the Location Surveys and Photogrammetry units. Note: The files in this folder should only be modified by the Location Surveys and Photogrammetry units. Other units should only reference them as is within this folder.
Environmental	Folder for files and documents and plans that pertain to environmental issues, used primarily by the Roadside Environmental Unit.
Geotech	Folder for Geotech design files.
GPK	Folder for <i>gpk</i> files. Each <i>gpk</i> file should have a unique <i>unit code</i> to prevent corruption of data. See GPK File Conventions
Hydraulics	Folder for Hydraulics design files.
LightingElectrical	Folder for Lighting & Electrical design files.
LocationSurveys	Folder for Location Surveys files such as .tin, .dtm, or .pln. Note: The files in this folder should only be modified by the Location Surveys unit. Other units may copy the files from this folder to another folder and then modify them, or reference them as is from within this folder.
Photogrammetric	Folder for files and documents related to aerial photography, topographic, planimetric and cadastral maps, base plan sheets, and preliminary cross-sections, aerial mosaics and photo plan sheets for highway design. These files follow the same format as the Location Surveys files. Note: The files in this folder should only be modified by the Photogrammetry unit. Other units may copy the files from this folder to another folder and then modify them, or reference them as is from within this folder.
RightOfWay	Folder for files and documents related to or necessary for acquisition of all necessary lands and rights of way used for highway construction. A "snap shot" of the RoW plans will be placed here (and all subsequent RoW revisions) when a project is sent to RoW.
Roadway	Roadway Folder Structure
Structures	Folder for files and documents related to structure design: bridges, culverts etc.
Traffic	Folder for files and documents related to general Traffic Engineering issues (including traffic control, pavement markings and delineation, signalization, and signing) are contained here.
Utilities	Folder for files and documents related to Utility Design are contained here.
WetLand	Folder for Environmental Document and PD&EA Issues.

NCDOT ROADWAY PLAN PREPARATION


- The following subfolders are under the Roadway folder and are for use by Roadway Design:


AutoTurn 

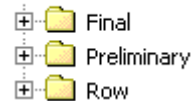
DGN file of Intersection examined
Autoturn Analysis Reports

The simulation files (SIM) are stored in C:\winn32app\Autoturn\output folder. A copy of these files is placed in the AutoTurn folder to be recorded and keep with the TIP Project.


Capacity 
HCS Analysis Reports

Doc 
Project Correspondence
Project Transmittals
Design Exception Check List
Approved Project Design Criteria Check List
CADD Project Log Sheets (DOC)
COGO Chains and Profiles Text Log Output Files (LOG)

Estimate 
Earthwork Balance Card
Estimates XLS spreadsheets
Estimates DGN Shape Files
Estimates Reports (Curb & Gutter and Seeding and Mulching)
Quantity Manager PDF files
SAPW Estimates (Consultant Only)



Func 
All Relevant Files in Functional Phase of Plan Composition. Please note that all relevant sub-folders can be created by Roadway.

HearingMaps 
PHM Files
PDF Hearing Map Files
All Reference PHM Shape Files

iFiles 
Full Size and Half Size iPlot
Organizer IPS Files
i Files
PHM iPlot Organizer IPS Files



Inp 
Geopak
COGO Input Files ONLY

See XSC folder for recommended location for earthwork and criteria input files.

Maximum file name length saved is limited to five (5) characters in the Geopak File Utilities Dialog Box.
Maximum file name length displayed is limited to eight (8) characters in the Geopak File Utilities Dialog Box.
Maximum file name length saved (and resave) is limited to 64 characters in the Geopak COGO key-in field.

Pictures 
Project Picture Files

NCDOT ROADWAY PLAN PREPARATION

Proj Proj ROADWAY ORIGINAL FILES

- DSN DGN Files
- PFL DGN Files
- PSH DGN Files
- ROW DGN Files
- ROW Parcel Index DGN File
- ROW Parcel Index XLS File
- SPD (SHEAR POINT DIAGRAM) DGN Files
- Structure Recommendation DGN Files
- SUM DGN Files
- SUMMARY XSL Files
- Survey Request DGN Files
- TSH DGN Files
- TYP DGN Files

COPIED FILES FROM OTHER UNITS

- BLN DGN Files
- BRL DGN Files
- ELN DGN Files
- PLN DGN Files
- SUE DGN Files
- TOP DGN Files
- WET DGN Files

Wedging Wedging

- Back-up (*.b0*) Wedging Files (Maybe deleted)
- PAR Wedging Files (Project Station Files)
- PRF Wedging Files (NCWedge Preference Files)
- GRD Wedging Files (NCWedge Grade Files)
- WQF Wedging Files (Wedging Quantity Files)

COPIED FILES

- EOP DGN Files
- GPK Files
- SHP DGN Files
- XSC DGN Files

XSC XSC

- Criteria Input Files
- Cross Section Sheet 1A XSL File
- EOP DGN Files (ORIGINAL)
- Earthwork Input Files
- Earthwork Report
- SHP DGN Files (ORIGINAL)
- Superelevation Input Files
- XPL DGN Files
- XSC DGN Files (ORIGINAL)

- More information and examples of file types and the information found in each folder can be located on the Roadway Design web site at:
- http://www.ncdot.org/doh/preconstruct/highway/roadway/index/folders/folder_str.html#ca

NCDOT ROADWAY PLAN PREPARATION

File Naming Convention

MicroStation CADD Files

The following Design File Naming Convention is implemented on all new projects. This naming convention is to be used by all NCDOT users and private engineering firms who produce TIP plans. Because of conflicts that have occurred with other applications, all design files will have the extension of DGN. This is the Bentley MicroStation assigned extension.

The following format is for all new design files:

(TIP Number)_(Unit Abbreviation)_(File Type)_(Description).dgn

for example:

R2005BA_RDY_DSN_070424.dgn

Where:

- TIP Number is the Transportation Improvement Program assigned number.
- Unit Abbreviation is the assigned [Unit Code](#).
- [File Type](#) describes the information in the file. (Property, Design, ROW, etc.)
- (Optional) Description is a user defined variable. (If a date is used, the format is year, month, day. A data of 070424 would be April 24, 2007)

Note: The latest version Design File Generator (2.04.11 or above) creates design files using this naming convention.

The Design File Generator Program (Discussed in Next Chapter) can be found in the NCDOT Workspaces in the following directory.

C:\NCDOT_V8_WORKSPACE\NCDOT_STDS\Standards\appl\

GEOPAK GPK Files

Each Unit will name their GPK file beginning with the word "JOB" followed by the assigned [Unit Code](#).

for example:

Roadway Design would name their GPK file "JOBRDY.GPK".